

GP-300972

ELECTRIC DIFFERENTIAL TRACTION-CONTROL DRIVE SYSTEM

ABSTRACT OF THE DISCLOSURE

In an electrical drive system, an electric differential comprises a first rotor for driving a first drive wheel, a second rotor for driving a second drive wheel, the first and second rotors capable of independent relative rotation, and a common stator for driving the first and second rotors. The common stator may comprise a single winding for driving both rotors or first and second windings for driving the first and second rotors respectively. A processor and a sensor system monitor parameters such as torque, speed, magnetic flux, etc. to detect the loss of traction by one or both drive wheels and adjust the operation of the motor until traction is regained.